NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(Pursuant to NAC 445A.236)

Permittee Name: Koch Performance Asphalt Co.
3901 W Ponderosa Way
Las Vegas, NV 89118

Permit Number: NEV88005

Location: 3901 W Ponderosa Way (between W Russell Rd and W Sunset Rd)
Arden area of unincorporated Clark County
Latitude: 36° 04' 58" N
Longitude: 115° 11' 30" W
Township 21 S - Range 60 E - Section 36

General: This is a modification to the third 5 year permit for this facility to include two additional discharges, boiler bottom blowdown and cooling tower bleed off, that were left off the previous applications.

The Koch plant receives asphalt cement from refineries via rail and truck, and by blending and mixing with other materials produces three asphalt products: asphalt cement of varying viscosities, polymer modified asphalt cement, and asphalt emulsion. While some of these can be applied directly, the major use is as a feedstock for asphalt batch plants where the material is combined with aggregate to produce the final asphalt product used for roads, parking lots, and other surfaces.

The discharges from this facility are directed to an asphalt lined evaporation pond and are the result of boiler blowdown, water softener regeneration, reverse osmosis backwash, boiler bottom blowdown, cooling tower bleed off, and stormwater runoff. The dimensions of the pond are 190 ft by 90 ft by 10 ft deep.

The boiler blowdown, water softener regeneration, and reverse osmosis backwash wastestreams report to the pond by way of a single sump pump (Outfall 001). Approximate water quality characteristics are as follows: boiler blow down pH 11.5, TDS 1300 to 2900 mg/l; water softener regeneration discharge pH 7.5, TDS 600 to 1000 mg/l; reverse osmosis discharge pH 7.4, TDS 1400 mg/l.

Boiler bottom blowdown is accomplished by manually turning a valve for approximately 15 seconds twice a day: this would result in too much hot water discharging to the sump too quickly for safe operations, so it's routed directly to the evaporation pond (Outfall 003). The water quality should on average be similar to the other boiler blowdown stream, which is an automated process drawing from the top of the water column. The maximum flow has been estimated at 240 gpd.

The cooling tower bleed off goes directly to the evaporation pond (Outfall 004) because the unit is located near there. It's maximum flow has been estimated at 288 gpd. Data submitted in August 2004 gives the TDS concentration as 6352 mg/l, VOCs as non-detect, and metals non-detect except for zinc which was reported at 0.17 mg/l.

Stormwater runoff from adjacent plant areas discharges to the pond via sheetflow (Outfall 002).

Receiving Water Characteristics: Since the discharge is contained within a lined evaporation pond there is no receiving water. Groundwater is at a depth of 60 to 75 ft. A caliche layer exists at a depth of about 20 ft. A monitoring well completed to the caliche layer near the pond has been inspected daily for the presence of water, which would indicate a leak in the pond - none has been found to date.

Flow: The average flow for the last half of 2003 was 1600 gpd.

Rationale for Permit Requirements: The flow limit of 10,000 gpd accommodates the estimated maximum flow with a large margin of safety. The influent streams from the process components are monitored for TDS and TPH as a basic check on water quality. The stormwater flow is subject to best management practice requirements without sampling.

Pond samples are analyzed for TPH and priority pollutant metals so any adverse changes would be detected. TPH levels have been mostly non-detect, with a maximum of 60 mg/l. Priority pollutant metals are also mostly non-detect, with recent results giving copper at 0.01 mg/l and zinc at 0.10 mg/l. Monthly visual inspections of the pond are required to track the condition of the exposed surface. Draining the pond for maintenance activities can be accomplished by applying the water to the unpaved portions of the site for dust control purposes, in a manner that prevents runoff and ponding.

The monitoring well is required to be inspected for the presence of water on a weekly basis as a method of leak detection, although the company actually does this daily. TPH, TDS, and priority pollutant metals analyses are required in the event water is detected. Water has not been detected to date.

Tables 1 and 2 below are taken from the permit and give limitations and sampling requirements for the discharge, pond, and well.

Table 1: Discharge and Pond Sampling

Parameter	Discharge Limitations	Monitoring Requirements		
		Sample Location	Measurement Frequency	Sample Type
Flow[1]	10,000 gpd 30 day average	[1]	continuous	meter
Total Dissolved Solids[2]	monitor & report mg/l	[2]	June and December	discrete
pH[2]	monitor & report standard units	[2]	June and December	discrete
Total Petroleum Hydrocarbons[3]	monitor & report mg/l	evaporation pond	June and December	discrete
Priority Pollutant Metals[4]	monitor & report mg/l	evaporation pond	June	discrete

(1) Combined total flow from boiler blowdown, water softener regeneration, reverse osmosis backwash, boiler bottom blowdown, and cooling tower bleed off. Record average daily flow in gallons per day (gpd) and report monthly average for each month in gpd. The discharges from outfalls 003 and 004 are estimated rather than measured. The basis for the estimate shall be included in each report.
(2) Samples shall be collected from the boiler blow down, water softener regeneration, reverse osmosis backwash, boiler bottom blowdown, and cooling tower bleed off. Sample results shall be reported separately for each waste stream.
(3) TPH shall be analyzed using USEPA Method 8015 (modified for extraction, and purge and trap).
(4) Priority Pollutant metals are antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, and zinc.

Table 2: Monitoring Well MW-1: Inspection & Sampling

Parameter	Limitation	Frequency	Sample Type
Presence of Water	-	weekly[1]	visual
Depth to Water	monitor & report	when water is present[3]	field measurement
TPH[2], mg/l	monitor & report	when water is present[3]	discrete
TDS, mg/l	monitor & report	when water is present[3]	discrete
Priority Pollutant Metals[4], mg/l	monitor & report	when water is present[3]	discrete

(1) Inspection logs shall be maintained onsite and copies shall be submitted with the DMRs.
(2) TPH shall be analyzed using USEPA method 8015 (modified for extraction, and purge and trap).

(3) If water is found in MW-1 and sampling shows the presence of TPH or any metals, additional sampling shall be done to confirm the presence and concentrations of TPH, TDS, and metals. If pond constituents are detected the liner shall be inspected immediately for leaks (i.e. - damage or deterioration).
(4) The Priority Pollutant Metals are: antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, zinc.

Schedule of Compliance: There is no schedule of compliance associated with this permit.

Proposed Determination: The Division has made the proposed determination to issue the proposed modified permit for the remainder of it's five year term.

Procedures for Public Comment: Notice of the Division's intent to issue (renew) the permit will be published in the **Las Vegas Review Journal**. Notice is also being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of thirty days following the date of publication. Comments can be mailed, faxed, or e-mailed to the author of this fact sheet at the address below. The comment period can be extended at the discretion of the Administrator of the Division. The deadline by which all written comments are to be postmarked or hand delivered to the Division is Friday January 7, 2005 by 5:00 p.m.

A public hearing on the proposed determination can be requested by the applicant, any affected state or agency, or any interested agency, person, or group of persons. The request must be filed within the comment period and indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any hearing must be held in the geographical area of the proposed discharge or other appropriate area at the discretion of the Administrator of the Division. All public hearings must be held in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Prepared by: Robert J. Saunders
Staff Engineer
Bureau of Water Pollution Control
Nevada Division of Environmental Protection
333 W Nye Ln
Carson City NV 89706
phone: (775)687-4670 x 3141
fax: (775)687-4684
email: rsaunder@ndep.nv.gov

Original: May 6, 2002
Modification: November 18, 2004